

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Service Rules for the 698-746, 747-762)	WT Docket No. 06-150
and 777-792 MHz Bands)	
)	
Revision of the Commission's Rules to Ensure)	CC Docket No. 94-102
Compatibility with Enhanced 911 Emergency)	
Calling Systems)	
)	
Section 68.4(a) of the Commission's Rules)	WT Docket No. 01-309
Governing Hearing Aid-Compatible Telephones))	
)	
Biennial Regulatory Review – Amendment of)	WT Docket No. 03-264
Parts 1, 22, 24, 27, and 90 to Streamline and)	
Harmonize Various Rules Affecting Wireless)	
Radio Services)	
)	
Former Nextel Communications, Inc.)	WT Docket No. 06-169
Upper 700 MHz Guard Band Licenses)	
and Revisions to Part 27 of the)	
Commission's Rules)	
)	
Implementing a Nationwide, Broadband,)	PS Docket No. 06-229
Interoperable Public Safety Network in)	
the 700 MHz Band)	
)	
Development of Operational, Technical and)	WT Docket No. 96-86
Spectrum Requirements for Meeting Federal,)	
State and Local Public Safety Communications)	
Requirements Through the Year 2010)	
)	
Declaratory Ruling on Reporting Requirement)	WT Docket No. 07-166
under Commission's Part 1 Anti-Collusion Rule))	

PETITION FOR RECONSIDERATION

TABLE OF CONTENTS

	<u>Page</u>
Summary	3
Introduction	3
Background	5
Impact of the Second Report and Order	8
Relief Requested	11
Conclusion	12

PETITION FOR RECONSIDERATION

SUMMARY

The Petition for Reconsideration argues that the Commonwealth of Virginia's new statewide public safety radio communications system (STARS), which is in the middle of a five-year implementation program, will be significantly harmed unless the Commission modifies Paragraphs 333-344 of its Second Report and Order.

The portions of the Second Report and Order prohibiting new public safety narrowband operations in portions of the 700 MHz spectrum would seriously disrupt the Commonwealth's public safety and homeland security functions by limiting STARS deployment and creating public safety communications systems which could not communicate with each other.

The portion of the Second Report and Order limiting cost reimbursements to radios in operation as of August 30, 2007 (with a \$10 million cap) would cause serious financial harm to the Commonwealth, which is the middle of a very expensive state-wide deployment of a state of the art system contracted for in 2004. The Commonwealth believes that it should be able to recover all of its STARS rebanding costs regardless of whether contracted equipment was in operation as of August 30.

Finally, the Commonwealth questions the accuracy of the Commission's \$6 million national estimate of 700 MHz rebanding costs, since the Commonwealth believes that its own rebanding costs will be well in excess of \$3 million, and requests that the Commission re-examine its national cost estimate.

INTRODUCTION

The Commonwealth of Virginia, by its counsel, hereby submits this Petition for

Reconsideration, pursuant to Section 1.429 of the Commission's Rules, directed to the Second Report and Order ("R&O") (FCC 07-132) in this proceeding, released on August 10, 2007.¹

Portions of the R&O prohibit authorization of new public safety narrowband operations in channels 63 and 68, or in the upper 1 megahertz of channels 64 and 69, as of August 30, 2007, and limits reimbursement of public safety rebanding costs to preprogrammed narrowband radios that are in operation as of August 30, 2007.²

The Commonwealth of Virginia ("Commonwealth") is in the process of implementing the Statewide Agencies Radio System ("STARS") to create a state of the art interoperable system to support public safety and homeland security needs. The contractual commitment by the Commonwealth for the STARS communication system's implementation occurred in July 2004 and delivery and implementation is occurring over multiple years with final delivery due in 2009. The Commonwealth respectfully requests that the Commission modify portions of the R&O to permit the Commonwealth to complete deployment of this statewide system by 2009, and to authorize reimbursement of the Commonwealth's rebanding costs for this project through its completion.³

While the existence of the STARS project has been well known by the Commission⁴, to the extent that this petition relies on facts which may not have been previously submitted to the

¹ The R&O was published in the Federal Register on August 24, 2007. 72 Fed. Reg. 48814-48868. This Petition for Reconsideration is therefore timely filed pursuant to Section 1.429(d) and 1.4 of the Commission's Rules.

² R&O, ¶s 333-344.

³ The Commonwealth has also filed a waiver request of August 30, 2007 with the Commission to address the hardships which the R&O would impose on the Commonwealth, and should the Commission fully grant the relief sought in that waiver request, the Commonwealth will not pursue this Petition for Reconsideration.

⁴ Comments were filed in this proceeding, in WT Dockets No. 06-169 and 96-86 by the Commonwealth as part of the November 13, 2006 Joint Comments of Regional Planning Committee 20, Regional Planning Committee 42 (700 MHz), the State of Maryland and the

Commission, the Commonwealth submits that consideration of the facts relied on is required in the public interest, i.e., the public safety and homeland security needs of both the Commonwealth of Virginia and of the United States (with respect to military and governmental installations located within Virginia).

BACKGROUND

The deployment of the Statewide Agencies Radio System (STARS) in Virginia is designed to create a shared statewide, industry standard (Project 25) public safety grade radio system compliant with FCC narrow-banding initiative and integrating mobile data using digital trunked technology. STARS utilizes an integrated voice and data land mobile architecture using the same mobile radio for both voice and computer communications. The Commonwealth signed a final contract with Motorola in July 2004 for over \$329 million to construct STARS on a turnkey basis. With amendments (related to specific tower sites, adding two new agencies, and additional subscribers) the cost is now in excess of \$337 million. STARS facilitates interoperability between 22 participating state agencies and 134 local communications systems in Virginia.

The Commonwealth has completed installation of approximately 64% of its STARS 700 MHz portable radios and mobile repeaters. The frequencies installed are in the lower half of the channels assigned in the State's license (Channel Numbers between 25 and 316). All are in the consolidated segment that is to become broadband. To change to the new frequencies within the consolidated narrowband spectrum now would force law enforcement and other STARS users to operate in two disparate frequency sets with one group unable in some cases to communicate

Commonwealth of Virginia, which describe the STARS system; and the Commission has granted the Commonwealth a variety of construction permit extensions for components of the STARS system and authorizations to acquire commercial mobile radio and maritime radio licenses to utilize as part of the STARS system.

with the other. In major state emergencies (recent examples would include the 9/11 attack on the Pentagon, the beltway sniper, the Virginia Tech massacre, and Hurricane Floyd and Tropical Storm Gaston) troopers and other officials from across the Commonwealth are deployed to the areas affected by the crisis. If the Commonwealth is not allowed to complete deployment of the STARS communication system as planned, portable radios and vehicular repeaters will not be able to directly communicate with each other

The STARS Integrated Voice and Data (IV&D) LMR system is designed for VHF mobile (not portable) coverage statewide. It is designed to solve the problem which occurs when public safety officers leave their vehicles, since this normally puts them out of radio contact with their dispatchers. STARS solves this problem by providing a low power 700 MHz vehicular repeater to extend the use of the VHF mobile radio within a short radius (less than one mile) of the vehicle. The VHF traffic from the mobile radio to the subscriber's portable radio is rebroadcast in conventional Project 25 digital mode at 700 MHz and the 700 MHz portable radio traffic is rebroadcast by the repeater at VHF in a Project 25 trunked mode.

Vehicular repeaters are used not only in routine public safety operations such as traffic stops by agency officers, but also during major incidents. The participating STARS agencies utilize these 700 MHz vehicle mounted repeaters extensively. STARS subscribers have already been deployed in every geographical area of the state, even in advance of the digital infrastructure being operational, because the VHF mobile radios are communicating via the Virginia State Police statewide analog network (and other legacy networks).

The Commonwealth had 1,488 DVRS units and 1,679 portable radios deployed in the field as of August 30th, 2007, and 452 DVRS units and 548 portable radios were ready to be deployed in the field as of the same date, leaving 962 DVRS units and 865 portable radios to be

deployed under the contract and project. All necessary equipment has been contracted for and purchased.

Even if the Commonwealth were to introduce the new frequencies immediately, and operate in some to-be-determined, degraded mode of operations, subscriber installations could take months to resume. The Commonwealth asserts that either an inability to communicate or an interruption in new installations would create critical officer and citizen safety issues that need to be avoided.

The STARS communication system will be fully operational in 2009, but major portions are already in place. The Richmond Division and Chesapeake Divisions have been constructed and are in active use. The contractor, Motorola, is in the process of installing the 700 MHz vehicle mounted and handset equipment for the entire Commonwealth.

The following is the current STARS project implementation schedule:

1.	Contract Awarded to Motorola	July 13, 2004
2.	Richmond Division Operational - Demonstration	December 2005
3.	Richmond Division Operational – Users Transitioning to STARS	January 2006
4.	Chesapeake Division Operational	June 2007
5.	Culpeper Division Operational	July 2008
6.	Fairfax Division Operational	October 2008
7.	Salem Division Operational	April 2009
8.	Appomattox Division Operational	May 2009
9.	Wytheville Division Operational	September 2009
10.	Final Full System Acceptance	October 2009

The 700 MHz equipment can be rebanded prior to January 31, 2009, the 700 MHz relocation date. The Commonwealth needs to perform both the 700 MHz and 800 MHz rebanding at the same time since recalling the entire fleet four times due to both bands being changed individually would pose an extreme burden on public safety providers, and seriously disrupt normal public safety officer deployment.

The Commonwealth is not aware of any means by which radios to be deployed after August 30, 2007, could be programmed to operate in the consolidated narrowband spectrum only and thus not require relocation. Moreover, the Commonwealth is unaware of any official frequency exchange chart for the State 700 MHz license which is presently available. Even if the replacement frequencies were known now, the Commonwealth could not accept the operational disparity of having part of the fleet on the current set of channels and part on the rebanded channels. In a large-scale public safety incident involving many responders from multiple STARS agencies throughout the state, there would be chaos if two disparate channel plans were involved, leading to potentially tragic results. The entire purpose of the STARS program has been to create a statewide network to facilitate communications among public safety responders all using the same system.

The Virginia General Assembly has provided yearly appropriations to fund deployment of STARS, establish and maintain the STARS project management office, and to retain an engineering consultant hired in July 2000. To date, the Commonwealth of Virginia has appropriated more than \$361 million for STARS. During a period of budget shortfall and cutbacks for the Commonwealth, additional costs such as rebanding cannot be absorbed.

IMPACT OF THE SECOND REPORT AND ORDER

The Commonwealth believes that the application of Paragraphs 336-337, 339 and 341-343 of the R&O, to the Commonwealth's STARS program, with the effect of shutting down deployment of a statewide public safety radio system and imposing costs on the Commonwealth related to STARS which would be in addition to the final development price previously budgeted and paid by the Commonwealth, would frustrate federal policy to support and promote public safety and homeland security applications for public safety agencies.

While the Commission's stated intention in adopting Paragraphs 336-337, 339 and 341-343 of the Second Report and Order, to create some certainty in reimbursement costs and prevent any inappropriate new deployment in the 700 MHz band, is understandable, the Commonwealth believes that the long-term statewide deployment of the STARS public safety radio system (which the Commission has historically supported through various extensions of construction schedules and authorizations to the Commonwealth to acquire commercial and maritime radio channels to ensure adequate statewide frequencies), with a definitive turnkey contract signed three years before the Commission's Second Report and Order, constitutes unusual (and perhaps unique) factual circumstances which would make application of Paragraphs 336-337, 339 and 341-343 to the Commonwealth contrary to the public interest, and merits reconsideration by the Commission.

The R&O sets August 30, 2007, as the effective date for certifying equipment in active use.

If the R&O were literally interpreted to prohibit new installations in the rebanded narrowband frequency blocks, this would place the Commonwealth in the untenable position of having to cease vehicle installation as of August 30, 2007 (ironically, with three months of the hurricane season remaining). The Commonwealth respectfully submits that it cannot simply cease installing equipment as of this date for any prolonged period without jeopardizing officer and citizen safety and even the project itself.

Strict compliance with the R&O could place the Commonwealth in a situation where the 700 MHz equipment installed before August 30th will be incompatible with that installed after this date, until the pre-existing equipment can be rebanded.

Replacing/reprogramming the code plugs and replacing hardware to reconfigure the currently installed STARS equipment could require months. Forcing the project to cease installation of 700 MHz portable/repeater equipment in inventory will effectively force STARS users to revert to a mobile-only system, presenting the Commonwealth with extreme officer safety and operational issues.

The Commonwealth is very concerned that the Commission did not have adequate information when it set suggested national costs of 700 MHz rebanding at \$6 million, and imposed a total cap of \$10 million. R&O paragraphs 341-343. The Commission relied upon one letter from Motorola in reaching its conclusion regarding the \$6 million national rebanding cost. R&O Paragraphs 333, 341. The Commonwealth does not know the underlying assumptions for that original estimate, but now has a concrete example which contradicts that estimate. Motorola has advised the Commonwealth that the hardware upgrade costs alone of 700 MHz rebanding for STARS will be \$1,000 for each of the Commonwealth's DVRS units (\$1.488 million for units in the field, and an additional \$1.414 million for units in inventory or on order). Costs of modifying 3,092 portable radios for STARS are uncertain, but anecdotal estimates in the \$48-\$100 range per radio suggest a cost in the \$150,000-300,000 range (assuming there will not be more hardware / firmware expenses). Costs of editing 147 templates for STARS code plugs are uncertain but an anecdotal estimate of \$3,000 per template would suggest a cost in the \$500,000 range. These modification costs would be before the Commonwealth's costs for consultants, government project management, work facilities, and employee overtime are considered. While it is too early to project any total range of STARS modification costs for the Commonwealth, it will clearly be in excess of \$3 million and a reasonable number may be in the \$4-5 million range. A \$3 million estimate for STARS equipment hardware alone clearly shows that the Commission

needs to reopen the record to re-examine the issue of a 700 MHz rebanding national \$6 million cost estimate.

Under the Commission's conclusion, not only would the Commonwealth be unable to recover rebanding costs of equipment placed in operation after August 30, but the \$10 million national cap means that the Commonwealth will only be likely to recover a small pro rata fraction of its rebanding costs for equipment already in operation as of August 30, 2007.

The Commonwealth (and other state and local public safety agencies) obviously cannot provide an estimate of national costs, but would suggest that the Commission should (i) reopen the public record for more information on costs, (ii) survey public safety agencies for cost estimates and (iii) analyze available Commission data on 800 MHz rebanding costs, to determine if 700 MHz rebanding costs can be projected from 800 MHz rebanding costs (since the engineering, installation, and equipment issues should be comparable.)

RELIEF REQUESTED

The Commonwealth respectfully requests that the Commission reconsider the effect of enforcing a fixed date on a project with equipment already purchased and with project rollout already underway. The Commonwealth also requests that it be permitted to continue installation of 700 MHz as contracted on the original narrowband frequency blocks to allow compatibility between all equipment in the entire 700 MHz system until the 700 MHz reconfiguration plan has been defined and funded, so it can safely, efficiently and effectively migrate to the new narrowband channel blocks.

The Commonwealth respectfully requests that it be allowed to complete deployment of the STARS communication system on the original narrowband frequency for which it has

contracted, certify all contracted equipment units for reimbursement, and be eligible to receive relocation funding reimbursement for all contracted equipment units.

While the Commonwealth acknowledges that portable and repeater system must be rebanded at some point, that effort needs to be accomplished in a planned way that minimizes the operational and officer safety issues inherent in such an effort. The Commonwealth intends to perform its 700 MHz rebanding by January 31, 2009, which is the 700 MHz relocation date established for its system by the National Public Safety Broadband Licensee in conjunction with the commercial partner.

The Commonwealth further believes that the Commission should reopen the record to re-examine the accuracy of its conclusion that \$6 million (and a \$10 million cap) is adequate to cover 700 MHz rebanding costs.

CONCLUSION

The Commonwealth respectfully requests that the Commission stay and modify the provisions of Paragraphs 333-344 of the R&O to (i) permit continued authorization and deployment of statewide radio public safety systems (such as STARS) in Channels 63 and 68 and the upper one megahertz of Channels 64 and 69 through January 31, 2009; (ii) allow the owner of a statewide radio public safety system (such as the Commonwealth) to obtain reimbursement for all its costs incurred in the installation of a statewide radio public safety system which was constructed for and was in the process of construction and implementation as of the date of the R&O, and allow certification of all such contracted for equipment as being in use as of August 30, 2007, (iii) reconsider the \$10 million cap on rebanding costs and (iv) such other relief as may seem just and appropriate.

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September 24, 2007

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